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Abstract

An atomic layer deposition (ALD) reactor (13) is disclosed that includes a substantially cylindrical chamber (15) and a wafer substrate (22) mounted within the chamber (15). The ALD reactor (13) further includes at least one injection tube (14) mounted within the chamber (15) having a plurality of apertures (32) along one side that directs gas emanating from the apertures (32) towards the wafer substrate (22). While gas is pulsed from the injection tube (14), either the wafer substrate (22) or the injection tube (14) is continuously rotated in a longitudinal plane within the chamber (15) to ensure complete and uniform coverage of the wafer substrate (22) by the gas.